Index–Part II

Alabama foundry sand geological data 244
Alabama foundry sands test data 324
Albany molding sands, Characteristics of 185
Albany molding sands and its relation to the Hudson River Shales, Distribution of 183
Albany sand tests 58
Albany sands, Cohesiveness or bonding strength of 214
Albany sands, Fineness tests of 190
Albany sands, Notes on grading of sands with special reference to 182
Albany sands, Permeability of 210
Albany sands, Standard grades of 197
Albany sands, Standard tests of 189
A. F. A. permeability apparatus, Tentative standard adopted by 143
Aspirator permeability apparatus, Smalley's 159
Base permeability of molding sands 31
Bond, Effects of water on 171
Bond of molding sand, Arrangement of 170
Bond of sand, Potential versus sensible 11
Bond or cohesiveness tests of foundry sands 60
Bonding quality of sands, Mulling experiments to determine 3
Bonding strength and permeability of molding sands, Relation of water to 168
Bonding strength of molding sands, Vibratory tests to determine 6
Bonding strength of three types of sands, Curves showing relation of permeability 238
Bonding test, Cohesiveness or 227
Bureau of standards permeability apparatus, Modified 139
Bureau of standards permeability test apparatus 121
California foundry sands geological data 253
California foundry sands test data 329
Clay content of molding sands as shown by the dye adsorption test, A study of the effects of heat on the 47
Cohesiveness, Grading of 217
Cohesiveness or bonding strengths of Albany sands 214
Cohesiveness or bonding test 227
Cohesiveness tests of foundry sands, Bond or 60
Cole permeability apparatus 165
Compression strengths of compacted sands, Green 74
Compression strength tests of foundry sands 61
Compression test 229
Compression test method, Description of 26

Index–Part II

Alabama foundry sand geological data..... 244
Alabama foundry sands test data..... 324
Albany molding sands, Characteristics of 185
Albany molding sands and its relation to the Hudson River Shales, Distribution of 183
Albany sand tests 58
Albany sands, Cohesiveness or bonding strength of..... 214
Albany sands, Fineness tests of..... 190
Albany sands, Notes on grading of sands with special reference to.... 182
Albany sands, Permeability of 210
Albany sands, Standard grades of 197
Albany sands, Standard tests of..... 189
A. F. A. permeability apparatus, Tentative standard adopted by..... 143
Aspirator permeability apparatus, Smalley's..... 159
Base permeability of molding sands..... 31
Bond, Effects of water on..... 171
Bond of molding sand, Arrangement of 170
Bond of sand, Potential versus sensible..... 11
Bond or cohesiveness tests of foundry sands..... 60
Bonding quality of sands, Mulling experiments to determine..... 3
Bonding strength and permeability of molding sands, Relation of water to 168
Bonding strength of molding sands, Vibratory tests to determine..... 6
Bonding strength of three types of sands, Curves showing relation of permeability 238
Bonding test, Cohesiveness or..... 227
Bureau of standards permeability apparatus, Modified..... 139
Bureau of standards permeability test apparatus..... 121
California foundry sands geological data..... 253
California foundry sands test data..... 329
Clay content of molding sands as shown by the dye adsorption test, A study of the effects of heat on the..... 47
Cohesiveness, Grading of..... 217
Cohesiveness or bonding strengths of Albany sands..... 214
Cohesiveness or bonding test.....227
Cohesiveness tests of foundry sands, Bond or..... 60
Cole permeability apparatus..... 165
Compression strengths of compacted sands, Green..... 74
Compression strength tests of foundry sands..... 61
Compression test 229
Compression test method, Description of..... 26

Cornell permeability apparatus..... 131
Currie permeability apparatus..... 161
Density of compacted sands..... 65
Discussion—A study of various sand mixtures..... 110
Discussion—A study of the effect of heat on the clay content of molding sand..... 52
Discussion—Commercial application of molding sand tests..... 45
Discussion—Molding sand reclamation and control experiments..... 14
Dry crossbending strength of compacted sands..... 75
Dry crossbending strength tests of foundry sands..... 62
Dry crushing strength test of foundry sands..... 62
Dry sand mold tests..... 89
Dye adsorption test 229
Dye absorption test, A study of the effect of heat on the clay content of molding sands as shown by the..... 47
English displacement permeability apparatus..... 156
Fineness tests of Albany sands..... 190
Foundry losses controlled by sand tests..... 13
Foundry sand geological data, Alabama..... 244
Foundry sand geological data, California..... 253
Foundry sand geological data, Illinois 366
Foundry sand geological data, Maryland..... 256
Foundry sand geological data Michigan..... 257
Foundry sand geological data, New Jersey..... 286
Foundry sand geological data, North Carolina.....280
Foundry sand geological data, Pennsylvania..... 301
Foundry sand geological data, Tennessee..... 303
Foundry sand geological data, Virginia..... 312
Foundry sand resources of Illinois, Description of tests..... 359
Foundry sand test data, Alabama..... 324
Foundry sand test data, California..... 329
Foundry sand test data, Illinois..... 384
Foundry sand test data, Maryland..... 330
Foundry sand test data, Michigan..... 331
Foundry sand test data, New Jersey..... 338
Foundry sand test data, New York..... 340
Foundry sand test data, North Carolina..... 344
Foundry sand test data, Pennsylvania..... 347
Foundry sand test data, Tennessee..... 348
Foundry sand test data, Virginia..... 353
Foundry sands, Report on geological survey data of.....244
Foundry sands, The physical properties of..... 57
Foundry sands of Illinois, Geological data of..... 366
Gasometer permeability apparatus, English..... 158
Geological survey data of foundry sands, Report on..... 244
Geological surveys, Report of sub-committee on..... 232

German design, Permeability apparatus of 154
Grades of Albany sands, Standard 197
Grading of cohesiveness 217
Grading of sands with special reference to Albany sands, Notes on 182
Grading permeability 213
Green compression strengths of compacted sands 74
Green strength? What is 91
Grubb permeability apparatus 127
Hardness of mold surfaces, Testing the 17
Heat on the clay content of molding sands as shown by the dye adsorption test, A study of the effect of 47
Illinois, Investigation of molding sand resources of 220
Illinois foundry sands geological data 366
Illinois foundry sand resources, Description of tests 361
Illinois foundry sands test data 384
Knapp permeability apparatus 162
Life of sand, Heat tests to determine 32
Life tests, refractoriness and 229
Maryland foundry sands geological data 256
Maryland foundry sand test data 330
Michigan foundry sands geological data 257
Michigan foundry sand test data 331
Millville gravel tests 47
Moisture determination of molding sand 12
Moisture test of molding sand 28
Mold surfaces, Testing the hardness of 17
Molding sand, Arrangement of bond of 170
Molding sand, Moisture determination of 12
Molding sands, Optimum water content of 176
Molding sand mixtures and molds and castings produced therefrom, A study of 98
Molding sand reclamation and control experiments 1
Molding sand resources of Illinois, Investigation of 220
Molding sand research, Report of chairman of joint commmittee on 222
Molding sand testing, Commercial application of 24
Molds, A new method of measuring the hardness of 17
Mulling experiments to determine bonding quality of sands 3
New Jersey foundry sands geological data 286
New Jersey foundry sand test data 338
New York foundry sand test data 340
North Carolina foundry sands geological data 280
North Carolina foundry sand test data 344
Optimum water content of molding sand 176
Pennsylvania foundry sand test data 347
Pennsylvania foundry sands geological data 301
Permeability, Testing molding sands to determine their 114

Permeability and bonding strength of three types of sands, Curves showing relation of 238
Permeability apparatus, A special easily constructed 150
Permeability apparatus, Bureau of Standards 121
Permeability apparatus, Cole 165
Permeability apparatus, Cornell 131
Permeability apparatus, Currie 161
Permeability apparatus, English displacement 156
Permeability apparatus, English gasometer 158
Permeability apparatus, German design of 154
Permeability apparatus, Grubb 127
Permeability apparatus, Knapp 162
Permeability apparatus, Modified Bureau of Standards 139
Permeability apparatus, Saeger 134
Permeability apparatus, Smalley's aspirator 159
Permeability apparatus, Tentative Standard adopted by A. F. A. 143
Permeability grading 213
Permeability of Albany sands 210
Permeability of compacted sands 69
Permeability of foundry sands 60
Permeability of molding sands, Base 31
Permeability of molding sands, Relation of water to permeability, bonding strength and 168
Permeability test 228
Permeability test apparatus 99
Permeability to other physical properties of sand, Relation of 115
Reclamation and control experiments, Molding sand 1
Refractoriness and life tests 229
Report of chairman of joint committee on molding sand research 222
Report of sub-committee on geological surveys 232
Report of sub-committee on testing methods 226
Report on geological survey data of foundry sands 244
Report on sand tests made at testing stations of the A. F. A. 236
Research, Report of chairman of joint committee on molding sand 222
Saeger permeability apparatus 134
Selection of sand, Application of test methods in the 30
Smalley's aspirator permeability apparatus 159
Sand, Application of test methods in the selection of 30
Sand, Arrangement of bond of molding 170
Sand, Heat test to determine life of 32
Sand, Moisture determination of molding 12
Sand, Moisture test of molding 28
Sand, Optimum water content of molding 176
Sand, Potential versus sensible bond of 11
Sand, Relation of permeability to other physical properties of 115

Sand, Vibratory test of molding 34
Sand control testing, Benefits derived from..... 40
Sand geological data, Alabama foundry..... 244
Sand geological data, California foundry..... 253
Sand geological data, Illinois foundry..... 366
Sand geological data, Maryland foundry.....256
Sand geological data, Michigan foundry.....257
Sand geological data, North Carolina foundry..... 280
Sand geological data, New Jersey foundry..... 286
Sand geological data, Pennsylvania foundry..... 301
Sand geological data, Tennessee foundry..... 303
Sand geological data, Virginia foundry..... 312
Sand mixtures and molds and castings produced therefrom, A study of molding 98
Sand mold tests, Dry 89
Sand reclamation and control experiments, Molding..... 1
Sand resources of Illinois, Description of tests of foundry..... 359
Sand test data, California foundry..... 329
Sand test data, Illinois foundry 384
Sand test data, Maryland foundry..... 330
Sand test data, Alabama foundry..... 324
Sand test data, Michigan foundry..... 331
Sand test data, New Jersey foundry..... 338
Sand test data, New York foundry 340
Sand test data, North Carolina foundry..... 344
Sand test data, Pennsylvania foundry..... 347
Sand test data, Tennessee foundry 348
Sand test data, Virginia foundry..... 353
Sand testing, Commercial application of molding..... 24
Sand tests, Albany 58
Sand tests, Foundry losses controlled by..... 13
Sand tests made at testing stations of A F. A., Report of..... 236
Sands, Base permeability of molding..... 31
Sands, Bond or cohesivness tests of foundry..... 60
Sands, Compression strength tests of foundry..... 61
Sands, Density of compacted..... 65
Sands, Dry cross bending strength of compacted..... 75
Sands, Dry cross bending strength tests of foundry..... 62
Sands, Dry crushing strength test of foundry..... 62
Sands, Green compressive strengths of compacted..... 74
Sands, Mulling experiments to determine bonding quality of..... 3
Sands, Permeability of compacted..... 69
Sands, Permeability of foundry..... 60
Sands, Relation of water to bonding strength and permeability of molding 168
Sands, Report on geological survey data of foundry sands..... 244

Sands, Standard grades of Albany 197
Sands, The physical properties of foundry 57
Sands, Vibratory tests to determine bonding strength of 6
Sands as shown by the dye adsorption test, A study of the effects of heat on the clay content of foundry 47
Sands of Illinois, Geological data of foundry 366
Sands of Illinois, Test data of foundry 384
Sands to determine their permeability, Testing molding 114
Standard permeability apparatus adopted by the A. F. A., Tentative ... 143
Strength? What is green 91
Strength and venting, Relation of water to 174
Strength of compacted sands, Dry crossbending 75
Sub-committee on geological surveys, Report of 232
Sub-committee on testing methods, Report of 226
Tennessee foundry sands geological data 303
Tennessee foundry sand test data 348
Test, A study of the effect of heat on the clay content of molding sand as shown by the dye adsorption 47
Test, Cohesiveness or bonding 227
Test, Compression 229
Test, Dye adsorption 229
Test, Permeability 228
Test apparatus, Permeability 99
Test for moisture determination of molding sand 12
Test method, Description of compression 26
Test methods in the selection of sands, Application of 30
Test of molding sand, Moisture 28
Test of molding sand, Vibratory 34
Test to determine life of sand, Heat 32
Testing, Benefits derived from sand control 40
Testing, Commercial application of molding sand 24
Testing methods, Report of sub-committee on 226
Testing molding sands to determine their permeability 114
Testing the hardness of mold surfaces 17
Tests, Albany sand 58
Tests, Discussion—Commercial application of molding sand 45
Tests, Foundry losses controlled by sand 13
Tests, Millville gravel 47
Tests, Refractoriness and life 229
Tests of Albany sands, Fineness 190
Tests of Albany sands, Standard 189
Tests of foundry sands, Bond or cohesiveness 60
Tests of foundry sands, Compression 61
Tests of foundry sands, Dry cross bonding strength 62
Tests of foundry sands, Dry crushing strengths 62
Tests made at testing stations of the A. F. A., Report on sand 236

Tests to determine bonding strength of sands, Vibratory..... 6
Water on the bond, Effect of..... 171
Water to bonding strength and permeability of molding sands, Relation of 168
Water to strength and venting, Relation of..... 174
Venting, Relation of water to strength and..... 174
Vibratory test of molding sand..... 34
Vibratory tests to determine bonding strength of sands..... 6
Virginia foundry sand test data..... 353
Virginia foundry sands, Geological data of..... 312

Authors' Index—Part II

Adams, T. C., Testing Molding Sands to Determine Their Permeability 114
Dietert, H. W., Commercial Application of Molding Sand Testing 24
Grubb, A. A., and Wolf, F. L., Molding Sand Reclamation and Control Experiments 1
Hansen, C. A., The Physical Properties of Foundry Sands..... 57
Harrington, R. F., MacComb, W. L., and Hosmer, M. A., A Study of the Effect of Heat on the Clay Content of Molding Sands 47
Harrington, R. F., Wright, A. S., and MacComb, W. L., A Study of Molding Sand Mixtures..... 98
Hosmer, M. A., Harrington, R. F., and MacComb, W. L., A Study of the Effect of Heat on the Clay Content of Molding Sand.. 98
Leighton, M. M., Investigations of the Molding Sand Resources of Illinois 220
Littlefield, M. S., Resources of Illinois Sands..... 359
MacComb, W. L., Harrington, R. F., and Wright, A. S., A Study of Molding Sand Mixtures..... 98
MacComb, W. L., Hosmer, H. A., and Harrington, R. F., A Study of the Effect of Heat on the Clay Content of Molding Sands..... 47
Nevin, C. M., Notes on the Grading of Sands with Special Reference to Albany Sands..... 182
Nevin, C. M., The Relation of Water to Bonding Strength and Permeability of Molding Sands..... 168
Ries, H., Report of Sub-Committee on Geological Surveys..... 232
Ries, H., Report of Sub-Committee on Testing Methods..... 226
Ronceray, E., A New Method of Measuring the Hardness of Molds.. 17
Saunders, W. M., Report of Chairman of Joint Committee on Molding Sand Research 222
Wolf, F. L., and Grubb, A. A., Molding Sand Reclamation and Control Experiments 1
Wright, A. S., MacComb, W. L., and Harrington, R. F., A Study of Molding Sand Mixture 98